

Application No. 10/809,595
Paper dated January 17, 2007
In reply to USPTO correspondence of October 17, 2006
PPG Case No. 1926A1
Attorney Docket No. 3152-063906

O I P E JAN 22 2007 IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent & Trademark Office
Application No. : 10/809,595
Applicants : Joseph M. Ferencz et al.
Filed : March 25, 2004
Title : FOCUSED HEAT EXTRUSION PROCESS FOR
MANUFACTURING POWDER COATING COMPOSITIONS
Group Art Unit : 1732 Confirmation No. : 7249
Examiner : J.M. Wollschlager Customer No. : 28289

MAIL STOP AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Sir:

For the reasons set forth herein, Applicants respectfully submit that the final Office Action dated October 17, 2006 is based on improper rejections of the claims and does not establish the asserted *prima facie* case of anticipation and/or obviousness based on the cited references.

**I. Rejections of Claims 1, 2, 6-9, 12 and 13 Under 35 U.S.C. §102(b) and
Claims 3-5, 10, 11 and 14 Under 35 U.S.C. §103(a) Based on PCT Publication No. WO
00/69916 (Giezen et al.)**

The final Office Action states that Giezen teaches a method for producing "biopolymer nanoparticles/powder coating compositions" citing to paragraphs [0012-0013]. Contrary to this assertion, there is no teaching of producing **powder coating compositions** in the Giezen application.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to MAIL STOP AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on January 17, 2007.

Florence P. Trevethan
(Typed Name of Person Mailing Paper)

Florence P. Trevethan, 01/17/2007
Signature Date

Para. [0012] indicates that the invention of Giezen pertains to nanoparticles obtained by extrusion of a biopolymer. The nanoparticles can then be used as a matrix material such as a resin in coating applications per paragraph [0013], such as a film-forming material, a thickener, a rheology modifier, or an adhesive or adhesive additive. The nanoparticles or dispersions thereof may be used as a chemical barrier, a carrier, a fat replacement, a component of cosmetic compositions, a medicament or in various other applications including in the paper making and packaging industry or in the agricultural and horticultural industries, or as removable and temporary coatings for protective purposes.

Nowhere does Giezen teach or suggest a process for manufacturing powder coatings in which the starting materials of the powder coating include a resin and a cross-linking agent and by which the heat history of the powder coating extrusion is controlled. To the extent that Giezen discloses use of the nanoparticles produced thereby in coating compositions, nowhere does the reference teach or suggest the production of **powder coatings** as recited by independent claims 1 and 9 of the present application.

The Examiner has failed to grant any patentable weight to the recitation in claims 1 and 9 that the respective claimed processes are for "manufacturing powder coatings" and for "manufacturing powder coating compositions". Instead, the Examiner stated that "the recitation powder coating has not been given patentable weight because the recitation occurs in the preamble". The Examiner apparently believes that the preamble merely recites the purpose of the claimed process and that the bodies of claims 1 and 9 do not depend on their preambles for completeness but could instead stand alone. No reason is provided by the Examiner for summarily categorizing the preambles of claims 1 and 9 as not being relevant to the patentability thereof.

Such a determination of whether the preamble of claims 1 and 9 limits the claims is made on a case-by-case basis. The Examiner's automatic determination that the preambles do not affect the scope of the claims is inappropriate.

Under the proper analysis, when the claim preamble is read in the context of the entire claim and recites limitations of the claim or is necessary to give life, meaning and vitality to the claim, then the preamble should be construed as if in the body of the claim.

Claim 1 recites a "process for manufacturing powder coatings" listing the following steps:

- A) feeding starting materials to an extruder;
- B) shear mixing the starting materials at an ambient temperature in a first portion of the entire extruder; and
- C) melt mixing the material from step B in a second portion of the extruder so as to achieve a melt mix, wherein the starting materials comprise a resin and a crosslinking agent.

Contrary to the assertion of the Examiner, the body of claim 1 with these steps A-C does not stand alone. Claim 1, as originally presented, recited “[a] process for manufacturing powder coatings”, and the specification clearly only refers to a process of manufacturing powder coatings. Nowhere are other compositions considered in the present application. The application clearly only considers an improvement in producing powder coating compositions.

As such, the requirements of claim 1 to first shear mix the starting materials, i.e., the starter materials of powder coatings, (step B) and then in step C, melt mix the material from Step B in another portion of the extruder require the use of starting materials of a powder coating composition. Thus, the recitation of “powder coatings” in the preamble provides the meaning or purpose of the claim. The preamble must be read in the context of the entire claim. Steps A-C of the claim do not fully and intrinsically set forth all the limitations of the claimed invention. Applicants have described and claimed the invention as relating to production of powder coatings. Therefore, the preamble of “[a] process for manufacturing powder coatings” is not merely an intended use of the method steps A-C, but actually results in a manipulative difference between the claimed method and prior art extrusion mixing methods.

Likewise, claim 9 recites “[a]n extrusion process for manufacturing powder coating compositions from starting materials”. The process of claim 9 also recites treatment of the starting materials of a powder coating composition. The starting materials of a powder coating composition are treated in the three portions of the extruder. Thus, the three portions of the extrusion process should be read in the context of producing powder coating compositions.

The prosecution history to date and the application itself are quite clear that the intended purpose of the claimed subject matter is in the production of powder coatings. For example, see the Interview Summary of December 20, 2006 and the Amendment submitted July 31, 2006.

The recitations in the preambles that the processes are for manufacturing powder coatings serves to limit the claims and is consistent with all the representations made by the Applicants to date. The record clearly demonstrates that the preambles’ statements of intended use in producing the powder coating is a basis for distinguishing over the prior art. Accordingly, the recitations in claim 1 of a process “for manufacturing powder coatings” and claim 9 of an extrusion process “for manufacturing powder coating compositions” should be considered upon examination of claims 1-14.

The Examiner has instead read those limitations of the preambles of claims 1 and 9 out of the claims. The application itself and the record to date demonstrate that the

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preambles are part of the claimed invention and that the preambles provide clear distinction of the claimed subject matter from Giezen.

Upon due consideration of the preambles of claims 1 and 9, the anticipation rejections of claims 1, 2, 6-9, 12 and 13 over Giezen and the obviousness rejections of claims 3-4, 10, 11 and 14 thereover are clearly overcome. Nowhere is there any teaching or suggestion to produce powder coating compositions in the Giezen reference.

II. Rejections of Claims 1, 2, 6-9 and 13 Under 35 U.S.C. §102(b) and Claims 3-5, 10-12 and 14 Under 35 U.S.C. §103(a) Based on PCT Publication No. WO/9817726 (Sherman et al.)

The Sherman reference is directed to a process for producing a mixture of an organic polymer and at least one polydiorganosiloxane urea containing components. The mixture is useful as plastics, release surfaces, pressure-sensitive adhesives, hot metal adhesives, vibration damping compositions and articles made therefrom. Sherman describes using a twin screw extruder as a reaction vessel in producing the polydiorganosiloxane urea containing component from a polyamine and a polyisocyanate. Nowhere is there any teaching or suggestion to produce a powder coating composition from the compositions disclosed by Sherman. As detailed above, claims 1 and 9 are properly read to require that the claimed processes manufacture powder coating compositions. For the same reason that the Giezen patent does not anticipate or render obvious any claims of the present application, the Sherman reference likewise does not teach or suggest producing powder coating compositions according to the present invention. Thus, claims 1-14 define over Sherman.

III. Rejections of Claims 1, 2, 6, 7, 9 and 13 Under 35 U.S.C. §102(b) and Claims 3-5, 10 and 11 Under 35 U.S.C. §103(a) Based on U.S. Patent No. 5,844,071 to Williams et al.

The Williams patent is directed to a process for making ink resins. While a resin and cross-linking agent are processed through an extruder having mixing zones, nowhere does the Williams patent teach or suggest extrusion of the components of powder coating compositions as claimed. As detailed above, the limitations in the preamble of claims 1 and 9 that the processes are for manufacturing powder coating compositions should be given patentable weight. Those limitations of the preamble give life and meaning to the claims and are consistent with all of the prosecution to date presented by the Applicants. Accordingly, claims 1-13 define over the Williams patent.

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IV. Conclusion

The Examiner should grant patentable weight to the preamble of claim 1 directed to a process for "manufacturing powder coatings" and to the preamble of claim 9 directed to a process for "manufacturing powder coating compositions". Accordingly, the rejections of claims 1-14 based on references that fail to teach or suggest processing the components of powder coating compositions as set forth in claims 1 and 9 should be withdrawn. Reversal of the final rejections and allowance of claims 1-14 are respectfully requested.

The Commissioner is authorized to charge any additional fees which may be required to Deposit Account No. 16-2025. Please refund any overpayments to Deposit Account No. 16-2025.

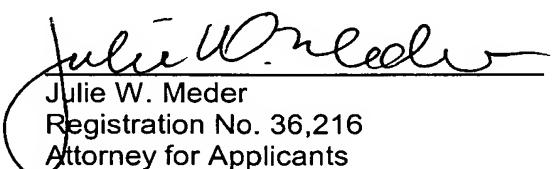
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Respectfully submitted,


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